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ABSTRACT

A theoretical framework for conceptualization and assessment of preadolescent children's coping in social situations is presented. The framework classifies responses to stressful social situations according to four categories, consisting of anxiety amplification, in which children focus on negative emotions concerning an event without attempting to alter the situation, and three coping strategies: positive coping, denial, and projection. A self-report instrument that assessed preadolescent children's social coping along these dimensions was developed. Internal and construct validity of the instrument was evaluated in a sample of 125 fourth- through sixth-grade, white, middle-class subjects. Factor analyses indicated a four-factor structure consistent with the four theoretically-derived dimensions. Each dimension demonstrated moderate internal consistency. Theoretical expectations regarding intercorrelations among the social coping dimensions were confirmed. The new measure also showed convergent and discriminant validity when correlations with perceived control, anxiety, and general self-esteem were examined. Children's popularity as rated by their peers was found to be significantly related to the children's endorsement of certain social coping strategies. Children tended to choose social partners with social coping styles similar to their own. (Author/RH)

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Children's Coping in Social Situations

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Abstract

A theoretical framework for conceptualizing and assessing pre-adolescent children's coping in social situations is presented. This framework classifies responses to stressful social situations into four categories: anxiety amplification (focusing on negative emotions surrounding the event without attempting to alter the situation), and three coping strategies: positive coping, denial, and projection. A self-report instrument which assesses pre-adolescent children's social coping along these dimensions was developed. Internal and construct validity of the instrument were evaluated in a sample of 125 4th through 6th grade, white, middle-class subjects. Factor analyses indicate a four factor structure consistent with the four theoretically-derived dimensions. Each dimension demonstrated moderate internal consistency. Theoretical expectations were confirmed regarding intercorrelations among the four social coping dimensions. The new measure also showed convergent and discriminant validity when correlations with other domain specific self-system variables (perceived control and anxiety) and general self-esteem were examined. Children's popularity as rated by their peers was also found to be significantly related to their endorsement of certain social coping strategies. Finally, children in this sample tended to choose social partners with similar social coping styles to their own.

Children's Coping in Social Situations

The process of coping is a central issue in studies of human and animal responses to stress. Given the ubiquitous nature of this process, it is not surprising that coping has been examined by researchers with widely divergent perspectives. Despite the differences among the various conceptualizations of coping, the consensus appears to be that coping is a behavioral and/or psychological response to either stressful, frustrating, anxiety-provoking or threatening situations (Keister,1943; Murphy and Moriarty, 1976; Rosenzweig, 1960; Haan, 1977; Maccoby, 1983; Holahan and Moos, 1987). In this paper, we present a theoretical framework and a new measure of coping in pre-adolescent children within the domain of social interactions.

In attempting to define coping in adulthood, investigators have struggled to specify what role conscious and/or unconscious processes play in coping responses and to assess whether coping is a trait or a situation specific response. Psychodynamic theories (*e.g.*, A. Freud, 1946) do not specifically refer to "coping" per se, but their basic formulations of defense mechanisms as emotional and/or behavioral responses to stress can be viewed as instances of coping responses. According to these theorists, the purpose of defense mechanisms is to protect the individual's self-concept and ego-integrity, regardless of the obtained outcome. Other researchers have excluded unconscious processes from their definition of coping. Stone and Neale (1984) define coping as "...those behaviors and thoughts which are consciously used by an individual to handle or control the effects of anticipating or experiencing a stressful situation" [p. 893]. Other researchers with similar perspectives highlight the importance of cognitive appraisal as a central component in the coping process. Lazarus and Folkman (1984) define coping as "...constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" [p. 141]. In contrast both to psychodynamic and cognitive definitions of coping, Pearlin and Schooler (1978) have defined coping responses based on how effective the responses are in preventing emotional stress. Psychological responses such as denial, and escapism are specifically excluded since they have not been found to be effective responses. This approach is problematic, however, in that if coping includes only responses that are effective in reducing stress, predictions to future adaptation are tautological.

Researchers also differ in the degree of situational specificity they attribute to coping responses. Some focus on the trait-like qualities of an individual's coping style (Krohne and Rogner, 1982; Haan, 1977) while others argue that the choice of coping responses may be more heavily determined by situational variables and conditions. Folkman and Lazarus examined an individual's actual coping responses to a specific stressful event. They found that coping responses vary based on the situational characteristics of the event as appraised by the individual (Folkman and Lazarus, 1980; Folkman and Lazarus, 1985). Holahan and Moos (1987) have studied both the personal and contextual determinants of coping strategies in response to negative life events. They found that, while previous coping strategies predict future coping strategies, current contextual characteristics also marginally predict the choice of coping strategies. Pearlin and Schooler (1978) have studied individuals' coping responses across four different domains: marriage, parenting, household economic and occupation and have found that some coping responses are common to all four domains while others appear to be domain specific both in their frequency of endorsement and in their effectiveness. In the present study, we consider the issue of domain specificity by investigating coping responses to negative events occurring in children's relationships with friends.

Compas (1987), in his recent review of how children and adolescents respond to stressful stimuli, points out that these studies span many areas of developmental research, including: attachment and separation during infancy, social support, interpersonal problem solving, coping in achievement contexts, Type A and B behavior patterns, coping styles of repression and sensitization, and resiliency or invulnerability to stress. Although difficult to summarize, the findings obtained in these diverse areas of research indicate that children do develop coping strategies to deal with stressful occurrences in their environment and that children's choice of coping strategies may be influenced both by temperament and the context in which the stressful event occurs. (See Compas, 1987 for review.)

Children and adults' coping has been studied as a predictor of future adaptation such as psychological and physiological distress following stressful events (Forsythe and Compas, 1987; Cohen and Lazarus, 1979); and academic or occupational success (Diener and Dweck, 1978). Coping has also been examined as an outcome of internal factors such as: personality style and temperament; the individual's appraisal and past experience of stressful events (Forsythe and Compas, 1987; Stone and Neale, 1984; Pearlin

and Schooler, 1978; Holahan and Moos, 1987); as well as external factors such as the social resources available to the individual (Holahan and Moos, 1987; Pearlin and Schooler, 1978).

Recently, researchers have begun to integrate these studies of antecedents and consequences of coping into more complete models of the coping process. Forsythe and Compas (1987) predicted and found that college subjects who endorse problem-focused coping strategies for events that are controllable and emotion-focused strategies for events that are not controllable showed less psychological symptoms following a stressful life event than subjects who did not endorse this coping pattern. In the present study, children's coping responses were examined in relation to other self-system variables, such as self-reported levels of anxiety, self-esteem and perceived control within the social domain. Additionally, we predicted that children's choice of coping responses in social situations would affect their popularity as rated by their peers and that children would tend to choose other children as work partners who endorse coping styles similar to their own.[1]

Attempts to assess coping responses in children reflect the broad and diverse areas cited by Compas (1987) as relevant to studying coping in children. They have included laboratory or field studies in which the variables of interest are measured: (a) by observing the child's behavior (i.e.: studies involving the strange situation(Ainsworth and Wittig, 1969)); (b) by an observer completing questionnaire reports of the child's behavior (Matthews and Angulo, 1980); (c) by asking children to provide an explanation for their behaviors or freely report their thoughts as they perform a cognitive problem solving task (Diener and Dweck, 1978; Spivack and Shure, 1985; Shure and Spivack, 1980); and (d) by self-report questionnaires, such as the Children's Academic Coping Inventory (Tero and Connell, 1984). The coping responses obtained through these various methods are then classified into response categories thought to reflect children's strategies for coping with stress.

Since the measure presented in this paper is most similar to the Children's Academic Coping Inventory (Tero and Connell, 1984), it is relevant to examine this questionnaire in greater detail, including the categories used to classify coping responses. The Children's Academic Coping Inventory was constructed to include "positive" and "defensive" strategies used by children in dealing with perceived academic failure (*e.g.*, "When I don't do well on a test,"), which are expressed either behaviorally or intrapsychically. Positive strategies are defined as situationally-oriented (*e.g.*, "I try to see what I did

wrong") whereas defensive strategies include projection (*e.g.*, "I get angry at the teacher") and denial (*e.g.*, "I don't think about it"). This measure also includes a category termed anxiety amplification in which the child focuses on negative emotions surrounding the event without attempting to alter the situation.

The Children's Social Coping Inventory, while similar to the Tero and Connell measure described above, assesses children's coping responses in the social domain. The social domain in this study is restricted to peer interactions assuming that coping responses are specific to particular sets of partners. However, we have also attempted to avoid too narrow an operationalization within this domain by including two instances of peer rejection experienced by most children (i.e.: "When my friends leave me out," and "When my friends don't go along with my ideas,"), rather than asking children to generate a single, specific event. Each of these "stems" is followed by coping responses that can be classified as either i.e.: positive coping (*e.g.*, "I try to find somebody else to do something with"), denial (*e.g.*,"I tell myself it doesn't matter"), projection (*e.g.*, "I tell myself they are stupid for not asking me") or anxiety amplification (*e.g.*,"I worry about whether it will happen again"). Children are asked to endorse each response on a four point Likert type scale.

In this paper, we present data addressing the factorial structure and internal validity of the new measure. We predicted that strategies designed to reduce levels of anxiety, such as denial, would be positively related to strategies directed toward more efficient problem solving, such as positive coping; and that projection and anxiety amplification would be positively correlated, since perceiving others as responsible for undesirable outcomes may engender feelings of anxiety.

We also assess the new measure's construct validity: (a) by examining its relation to convergent and discriminant constructs as assessed by other self-report measures; and (b) by correlating the new measure with sociometric ratings. Three variables were examined as possible concomitants of children's social coping strategies, namely, self-reports of: (a) perceived control in the social domain (Connell, 1985); (b) general self-esteem (Harter, 1982); and (c) social anxiety (Buhrmester, 1980). We predicted that positive coping strategies would relate positively to internal perceptions of control in social settings. Anxiety amplification was expected to be associated with unknown perceptions of control, lower general self-esteem and a trait measure of social anxiety. Previous studies have found that projection correlates positively

with perceptions that powerful others are responsible for social outcomes. However, since the powerful other perceived control items in this study reflect teacher control over social failures, exploratory analyses were conducted to assess whether the domain specificity (i.e.: social vs. cognitive) or the partner (i.e.: teacher vs. peer) was the more salient factor in the relation between projection and powerful others perceived control. Correlations of denial responses with social anxiety and perceived control were also examined in exploratory analyses.

Discriminant validity of the new measure was assessed by correlating the social coping subscales with the same self-system variables in the social domain and the cognitive domain. Although we expected some across-domain correlations, stronger relations of the new measure to the social variables than to the cognitive variables would support the discriminant validity of the new measure.

Sociometric ratings by peers were obtained in order to assess relations between children's coping responses and the children's popularity with their peers. Correlations of the four coping subscales with frequencies of peer nominations and correlations between the coping styles of subjects and the peers they nominated were examined. We hypothesized that more positive coping and less projection and anxiety amplification would be associated with more frequent peer nominations on the sociometric rating. We also predicted that children would nominate other children to share interactive tasks who have similar coping styles. Children may choose workmates who deal with stressful situations in a similar manner and, through their continued association with each other, their coping styles may become increasingly similar.

In sum, a new measure of pre-adolescent children's coping with social difficulties is presented, along with evidence for its usefulness in discriminating among four styles of coping: positive coping, denial, projection and anxiety amplification.

Method

Subjects

The 125 4th through 6th grade subjects were recruited from a lower to upper middle class, predominantly white, suburban elementary school. Parental permission was obtained for all subjects. Approximately 75% of

parents contacted agreed to have their children participate. The subjects were equally distributed by sex, with 24 subjects in 4th grade, 55 in the 5th grade and 46 in the 6th grade. There were three teachers per grade.

Procedures

The questionnaires used in this study were part of a larger battery of measures administered to the subjects in their classrooms over four consecutive days. Each administration took approximately 30 to 40 minutes. The questionnaires were administered by experienced testers to groups of approximately 25 students. Testers read the standardized instructions as well as each item aloud to facilitate accurate understanding and attention. The presentation order of the measures was counterbalanced within and between sessions. Individual interviews were also conducted in the school before the administration of the questionnaires with 92 of the subjects, in order to obtain sociometric ratings of children in their classes. (See description of sociometric measures below.)

Measures

The Children's Social Coping Inventory, Initial Version. The initial version of the Children's Social Coping Inventory included 33 items based on the Tero and Connell response categories and on responses provided to open-ended pilot interviews conducted with approximately 20 children in 3rd through 6th grade in the participating school district. In these interviews, children were asked to tell the interviewer about "something bad that happened with your friends" and what they thought and did when that event occurred. The questionnaire's two coping stems were derived from the children's most common responses, namely, "When my friends leave me out," and "When my friends don't go along with my ideas,". Each stem was followed by 16 coping responses, also selected from the children's most conceptually meaningful and frequently provided responses. These responses were classified using the four coping categories described by Tero and Connell, i.e.: positive coping, denial, projection and anxiety amplification. When completing the questionnaire, subjects endorsed the items by using the following four point scale: very true/sort of true/not very true/not at all true. Subscale scores were obtained by averaging a subject's subscale items, where a high score indicates greater endorsement of a particular category of coping responses.

Theoretically derived configuration scores were also obtained to identify children whose dominant coping style is positive coping and children whose dominant coping style is either projection or anxiety amplification. These scores were obtained by identifying children who scored one standard deviation or more above the mean on positive coping and less than one standard deviation above the mean both for projection and anxiety amplification (positive coping configuration); and by identifying children who scored one standard deviation above the mean on either projection or anxiety amplification and less than one standard deviation above the mean on positive coping (projection/anxiety amplification configuration).

Other Self-System Measures. The Perceived Competence Scale for Children (Harter, 1982) is a 28 item self-report measure which assesses children's evaluations of their perceived cognitive, physical and social competence as well as their general self-esteem. Only the subscale for general self-esteem was used in this study. The alpha reliability for this subscale is reported as 0.73.

The Multidimensional Measure of Children's Perceptions of Control (Connell, 1985) is a 48 item self-report measure that assesses children's perceptions of control (including internal, powerful others and unknown) in general as well as within three different domains: cognitive, social and physical. Only the subscales referring to failure situations in the cognitive and social domains were used in this study.

The Children's Concern Questionnaire (Buhrmester, 1980) is a 28 item self-report measure designed to assess children's worries and anxiety associated with outcomes from school activities. This measure is composed of four subscales, addressing worries over test performance, peer acceptance, physical activities and school conduct. The subscales corresponding to peer acceptance and test performance were used in this study. These subscales have alpha reliabilities of 0.81 and 0.79, respectively.

Sociometric measures. An interview measure was developed to obtain sociometric ratings of their classmates from the subjects. The following instructions were presented to subjects:

> "Now let's talk about some kids you know here at school. From this list, pick the kid you would most like to work with on a project that's going to be graded. Now give me your second choice. Now your third choice. Now pick the kid you would most like to work on a fun project with in school. Now give me your second choice. Now your third choice."

The lists from which the subjects were asked to choose included the names of other children in their grade who had parental consent to participate in the study. For the purposes of our study, only the subjects' first choice was used in the analyses, as this would provide the clearest index of popularity for the children chosen.

Results

Internal Structure

In order to assess the new measure's internal structure, principal components factor analyses with oblique rotation were performed separately on the 16 items corresponding to each stem. Four factor solutions were specified for each set of items, based on the four theoretically derived coping subscales. Items loading less than 0.39 on a given factor were eliminated from further analyses. The final solution yielded 12 items and a clear four factor structure for each stem. When all 24 items were entered into the analysis, a clear four factor structure resulted as well. (See Tables 1, 2 and 3.) Cronbach alpha coefficients for the four coping subscales are as follows: positive coping 0.60, denial 0.63, projection 0.70, and anxiety amplification 0.68.

Insert Tables 1, 2 and 3 about here

Based on the final 24 items obtained in the four factor solution, means for each child for each subscale were computed. The means and standard deviations for the four subscales are presented for the entire sample as well as by sex and grade in Table 4. Anova tests were performed on the four coping subscales to ascertain the effects of grade and sex on coping. While there were no main effects for grade or sex on positive coping and anxiety amplification, a marginal decrease in the mean level of denial with increasing grade was obtained ($F(2,114) = 2.34$, $p < 0.10$) as was a significant decrease in the mean level of the projection subscale ($F(2,114) = 6.70$, $p < 0.001$). Additionally, sex main effects as well as sex by grade interaction effects were obtained for the denial subscale, with girls showing lower mean levels of denial than boys ($F(1,114) = 4.80$, $p < 0.05$) and girls showing a greater decrease in the mean level of denial with grade than boys ($F(2,114) = 7.69$,

$p < 0.001$).

Insert Table 4 about here

Correlations among the four coping subscales were also examined, based on the final four factor solution. Significant correlations were obtained between the positive coping and denial subscales ($r = 0.24$, $p < 0.01$) and between the projection and anxiety amplification subscales ($r = 0.23$, $p < 0.01$), as predicted. All other correlations were less than $|r| = 0.15$.

Convergent Validity

In order to assess the new measure's convergent validity, the social coping subscale means were correlated with other self-report measures of self-esteem, anxiety and perceived control. The results are presented in Table 5. The positive coping subscale was significantly related to self-reports of higher perceived internal control for social failure. However, projection was not significantly related to perceptions that powerful others (teachers) are responsible for social outcomes. Anxiety amplification scores were associated with lower self-esteem, higher scores on a trait measure of social anxiety, and higher unknown perceptions of control for social failure. Only one significant correlation was obtained between the denial subscale and the other self-system processes: denial was negatively associated with blaming social failures with peers on unpopularity with teachers.

Insert Table 5 about here

Discriminant Validity

In order to ascertain the discriminant validity of the new measure across two domains, the correlations between social coping and the social subscales of the anxiety and the perceived control measures were compared to the correlation of the social coping and the cognitive subscales of these same measures (Cohen and Cohen, 1983, p.56). The correlations among these measures are presented in Table 5. Although all of the predicted relations of the social coping subscales with self-reports of anxiety and perceived control

are more highly correlated within the social domain than across domain, only one of the five comparisons achieved statistical significance and one approached significance. Anxiety amplification in the face of social failure was more highly related to a trait measure of social anxiety than to a trait measure of cognitive anxiety ($t(116) = 1.93$, $p < 0.10$), and was more strongly correlated to unknown perceptions of control over failures in the social domain than in the cognitive domain ($t(116) = 2.15$, $p < .05$).

External Validity

The following formula was used to compute a sociometric index of popularity which would be comparable across grades: Number of times a child in 4th [5th, 6th] grade was selected × length of 4th [5th, 6th] grade subject list) ÷ number of subjects interviewed in 4th [5th, 6th] grade.[2] This index was then used in all subsequent analyses of relations between the new social coping measure and popularity.

Two methods of scoring the new coping measure were used in the analyses of the sociometric data: subscale scores and configuration scores. The particular configurations chosen were based both on theoretical considerations as well as on the obtained positive correlations between the projection and anxiety amplification coping subscales. In general, we predicted that children who endorse positive coping would be more popular with their peers than children who rely more heavily on projection or anxiety amplification. More specifically, we predicted that children who tend to endorse positive coping in social situations at a level higher than their peers while endorsing projection and anxiety amplification at moderate or low levels, would be most popular with their peers. Conversely, children who endorse either projection or anxiety amplification at a level higher than their peers, while endorsing positive coping at a moderate or low level, would be less popular with their peers.

Correlations of the subscale and configuration scores with the sociometric index of popularity are presented in Table 6. Results based on subscale scores indicate that endorsements of either denial or positive coping strategies in social situations were associated with more frequent peer nominations for fun projects but not for graded projects. In contrast, endorsement of projection or anxiety amplification in social situations was negatively correlated with being chosen as a work partner for graded projects but not for fun projects. The low magnitude of these relations increased when configuration scores were used. Children who endorse positive coping at a level higher than

their peers while not relying excessively on either anxiety amplification or projection (N = 13) are significantly more likely to be chosen as a work partner for fun projects but not graded projects. Children who endorsed either projection or anxiety amplification to a greater extent than their peers while endorsing positive coping strategies at only a moderate or low level (N = 27) were significantly less likely to be picked as work partners both for graded and fun projects.

Insert Table 6 about here

Extreme group analyses were also conducted in order to determine whether children who were never nominated by their peers (for graded projects: N = 73, and for fun projects: N = 70) showed more problematic social coping responses than children who were nominated by more than one peer for these projects (N = 23 and 21, respectively). Phi coefficients between configuration scores and extreme group sociometric ratings were consistent with earlier results. In the case of the positive coping configuration and subscale scores, the magnitude of the relation between coping style and being chosen for a fun project increased. No such increase was obtained for analyses involving partners for graded projects or the anxiety amplification/projection configuration scores.

Finally, the interviewed subject's coping subscale scores were correlated with the coping subscale scores of the child chosen as a partner for a fun/graded project. Results are presented in Table 7. As predicted, children tended to choose partners both for graded and fun projects who endorse similar coping styles to their own. Only the anxiety amplification subscale did not show this matching effect.

Insert Table 7 about here

Discussion

We found that the new questionnaire measure of children's social coping yielded a four factor structure consistent with the four theoretically-derived dimensions specified: positive coping, denial, projection and anxiety

amplification. Additionally, each subscale demonstrated moderate internal consistency. The fact that each subscale includes items representing different manifestations of the particular coping style may have reduced the subscale's internal consistency. For example, the positive coping subscale includes different active coping strategies, such as: "I go do something by myself" and "I go and talk to them about what happened". This diversity of content within each subscale, while potentially reducing internal consistency estimates, may also increase the content and construct validity of the new measure.

Scores from the coping measure were also found to correlate among themselves in predictable ways. Projection and anxiety amplification correlated positively with each other, indicating that children who tended to blame others for failure also report feeling anxious and concerned about social rejection. Conversely, children who endorsed positive coping strategies also tended to endorse denial, suggesting that children who actively attempt to address situations of social failure may either initially or simultaneously engage in emotion-focused strategies to reduce their own level of concern when negative outcomes do occur. Alternatively, children who endorse positive coping strategies may actually be more competent in socially stressful situations. Thus, they have a justifiably lower level of concern about instances of social rejection, resulting in their higher endorsement of the denial items. Because the measure was not administered longitudinally in this study, we are unable to determine whether the use of these coping strategies follows any given sequence.

The mean level of endorsement for projection decreased with grade, possibly reflecting increased sensitivity to the social undesirability of this particular subscale in this middle class sample. Interestingly, mean levels of endorsement for denial decreased with grade, especially for females. With age, it may become less acceptable for girls to "forget" or "not care" about social rejections than it is for boys, even though denial coping strategies are associated with using positive coping strategies as well.

The new measure also correlated as predicted with other self-system variables, namely: perceived control, self-esteem and anxiety. Positive coping was correlated with higher perceived internal control for social failure, indicating that children who believe they have done something to bring about undesirable social outcomes also tend to approach situations of social failure in a more active, problem solving manner. Children who have acquired specific strategies which enable them to be competent in social interactions

may also be more aware of the instrumental role they play in avoiding undesirable social outcomes.

There were no significant relations between the use of projection and the degree to which children see teachers as controlling undesirable social outcomes (*e.g.*, If teacher doesn't like me, I won't have friends in class). It is unlikely that children who endorse projection coping items, such as "I tell myself they [the children] are stupid for not asking me" will also endorse items reflecting teacher control over social situations. Items specifically assessing whether children believe that other peers have control over social outcomes need to be included in future studies in order to more precisely test the hypothesized relation between projection and powerful others perceived control.

Anxiety amplification was found to be related to lower self-esteem, higher scores on a trait measure of anxiety, and higher unknown perceptions of control for social failure. This pattern of results suggests that children who say they do not know why they are rejected are generally more anxious in social situations and tend to become increasingly anxious and concerned when faced with situations of social failure. This anxiety, in turn, may contribute to the child's inability to learn more effective social strategies (unknown control) when faced with similar socially stressful situations in the future.

No specific predictions were made regarding the denial subscale in relation to perceived control and self-esteem. The one significant correlation that was obtained using the denial subscale indicated that lower levels of denial were correlated with higher attributions of social failure to teachers' control. This may suggest that children who are able let social rejection "roll off their backs" have less of a need to blame powerful others, in this case teachers, for undesirable social outcomes.

All of the predicted correlations between the social coping subscales and the social self-system processes were greater in magnitude than those between the social coping and the same self-system processes within the cognitive domain. However, only one of the former set of correlations was significantly higher than the latter. Confirmation of the predicted pattern of discriminant correlations coupled with the failure to obtain statistical significance when comparing across domains suggest that, while some domain specificity of children's self-system processes is clearly present, there may also be considerable common influence of more generalized self-system processes. Post-hoc analyses revealed that there was a cross-domain correlation of the

powerful others control scale in the social domain and the projection coping subscale in the academic domain, suggesting that the particular target of blame for failures (i.e.: teacher, in both cases) may be a more salient locus of consistency than the domain in which the failures occur (i.e.: social or academic). It remains to be seen whether children who endorse projection in social situations would also cite peers as being responsible for negative social outcomes.

We predicted that the way in which children deal with socially stressful situations would affect their popularity with their peers. This prediction was supported by the obtained correlations between sociometric ratings and the new coping measure. Furthermore, it appears that the four types of coping strategies are differentially important for peer nominations depending upon the nature of the activity a child is being chosen for, with positive coping and denial more predictive of peer nominations for fun projects, and projection and anxiety amplification more negatively associated with nominations for graded as well as fun projects. These patterns of findings were most pronounced when configuration scores were used, indicating that it is not just the overall level of endorsement for any given subscale that determines a child's desirability as a social partner. Rather, it appears to be a function of the relation among the coping subscales. These findings suggest that children prefer working on a fun project with other children who actively problem solve around social difficulties without becoming overly concerned about consequences of the difficulty. However, this same combination of social coping styles appears to be less important in choosing a partner for a graded project. In contrast, the coping responses which might be considered less socially desirable, namely projection and anxiety amplification, affect being chosen both for graded or fun projects. Thus, children who endorse either projection or anxiety amplification and who do not endorse positive coping strategies may be less appealing as work partners, whether the target task be for fun or for a grade.

Finally, it appears that children tend to choose work partners who endorse similar coping strategies to their own. Positive coping, denial and projection all showed significant positive correlations when the interviewed children and their chosen partners' scores were compared. This may indicate either that children choose partners who respond in a similar manner as they do in social situations; or, that children develop similar styles as they continue to interact. Interestingly, it was not only the "more adaptive" coping strategies that showed the matching between children and their chosen work partners.

Projection was also found to match, suggesting that these children may join together in a sort of "bunker mentality" against their more popular peers. The only subscale that did not show the matching effect was anxiety amplification, suggesting that children who endorse anxiety amplification as a response to socially stressful situations do not choose partners who do likewise. It may be that children who tend to become very anxious find their anxiety exacerbated by children who also respond anxiously in these situations.

In sum, we have presented initial evidence for the internal, convergent, discriminant and external validity of a new measure of social coping in pre-adolescent children. Although the modest size and socio-economic homogeneity of our sample restrict the study's generalizability, this investigation provides preliminary support for the usefulness of a new self-report instrument based on a particular four dimensional model of these social psychological processes.

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Footnotes

1. We extend our appreciation to John Mellor-Crummey, M.S., who suggested this final analysis.

2. Because subjects were asked to select a work partner for a fun/graded project from a list of other children in their grade who were participating in the study, the lists varied in length by grade (number of chidren on the list per grade: grade 4 = 24, grade 5 = 56, grade 6 = 46). Additionally, varying numbers of children were actually interviewed by grade (number of children interviewed by grade: grade 4 = 18, grade 5 = 52, grade 6 = 22). The combinations of these two factors makes the absolute number of times a child was selected incomparable across grades.

Table 1: Social Coping Questionnaire - Part One

When my friends leave me out:

	FACTORS			
	1	2	3	4
Denial				
I tell myself it doesn't matter	.66			
I forget about it	.76			
Anxiety Amplification				
I feel that no one likes me		.75		
I worry about whether it will happen again		.68		
I worry that they don't like me		.82		
Positive Coping				
I try to find somebody else to do something with			.67	
I think about things that make me feel good about myself			.63	
I go and talk to them about what happened		.39	.46	
I go do something by myself			.49	
Projection				
I tell myself they are stupid for not asking me	-.40			.64
I plan ways to get back at them				.77
I tell myself I'll never play with them again				.72

Table 2: Social Coping Questionnaire - Part Two

When my friends don't go along with my ideas:

	FACTORS			
	1	2	3	4
Denial				
I tell myself it doesn't matter	.80			
I say that I don't care	.62		-.37	
I forget about it	.71			
Anxiety Amplification				
I feel really ashamed		.77		
I tell myself it was a bad idea		.70		
Positive Coping				
I go off and find someone else to do it with			.62	
I think about the times everyone did what I wanted			.61	
I try to find out why they didn't like my idea			.59	
Projection				
I decide I won't listen to any of their ideas				.72
I tell myself that they won't listen to anyone's ideas		.43		.54
I tell myself that they're too dumb to realize my idea was good				.68
I feel really mad at them				.73

Table 3: Social Coping Questionnaire

When my friends leave me out:
When my friends don't go along with my ideas:

	FACTORS			
	1	2	3	4
Positive Coping				
I try to find somebody else to do something with	.47			
I think about things that make me feel good about myself	.45			
I go and talk to them about what happened	.52	.37		
I go do something by myself	.46			
I go off and find someone else to do it with	.51			
I think about the times everyone did what I wanted	.44			
I try to find out why they didn't like my idea	.65			
Anxiety Amplification				
I feel that no one likes me		.72		
I worry about whether it will happen again		.69		
I worry that they don't like me		.77		
I feel really ashamed		.42		
I tell myself it was a bad idea		.47		

Table 3 (Continued)

When my friends leave me out:
When my friends don't go along with my ideas:

	FACTORS			
	1	2	3	4
Denial				
I tell myself it doesn't matter			.59	
I forget about it			.60	
I tell myself it doesn't matter			.57	
I say that I don't care			.59	
I forget about it			.71	
Projection				
I tell myself they are stupid for not asking me				.70
I plan ways to get back at them				.57
I tell myself I'll never play with them again				.54
I decide I won't listen to any of their ideas				.43
I tell myself that they won't listen to anyone's ideas				.45
I tell myself that they're too dumb to realize my idea was good				.69
I feel really mad at them				.60
Variance accounted for by each factor	10%	11%	9%	12%
Total variance accounted for = 41%				

Table 4: Social coping subscale means and standard deviations by grade and sex.

	Positive Coping		Denial		Projection		Anxiety Ampl.	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Grade 4	2.71	0.63	2.87	0.60	2.27	0.64	1.95	0.81
Boys (N=13)	2.55	0.53	2.63	0.48	2.45	0.63	1.89	0.92
Girls (N=7)	3.02	0.66	3.31	0.39	1.93	0.35	2.05	0.58
Grade 5	2.49	0.43	2.75	0.57	2.05	0.51	1.88	0.40
Boys (N=24)	2.54	0.38	3.01	0.52	2.13	0.56	1.80	0.39
Girls (N=30)	2.44	0.47	2.54	0.54	1.98	0.44	1.95	0.41
Grade 6	2.52	0.50	2.58	0.58	1.78	0.50	1.93	0.64
Boys (N=21)	2.62	0.44	2.71	0.57	1.72	0.56	1.79	0.58
Girls (N=20)	2.41	0.54	2.44	0.56	1.83	0.44	2.09	0.70
All Grades	2.52	0.49	2.67	0.60	2.00	0.55	1.90	0.58
Boys (N=58)	2.57	0.43	2.82	0.57	2.05	0.63	1.82	0.61
Girls (N=57)	2.50	0.54	2.60	0.59	1.92	0.43	2.01	0.54

Table 5: Significant correlations between social coping subscales and self-esteem, anxiety and perceptions of control.

	Positive Coping	Denial	Projection	Anxiety Amplification
Self-esteem				-0.27**
Anxiety				
Social	0.21**		0.21*	0.55****
Cognitive	0.20*		0.26**	0.40****
Internal Control				
Social Failure	0.26**			
Cognitive Failure	0.15	0.21*		
Unknown Control				
Social Failure	0.17*			0.30***
Cognitive Failure				0.07
Powerful Others Control				
Social Failure		-0.24**	0.10	
Cognitive Failure			0.11	

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$
**** $p < 0.0005$

Table 6: Correlations of sociometric ratings with social coping subscales and configuration scores.

	Fun project		Graded project	
	Full range	Extreme grp	Full range	Extreme grp
Positive coping	0.16	0.31**	0.03	0.05
Denial	0.27**	0.34**	0.11	0.16
Projection	0.00	0.12	-0.16	-0.14
Anxiety Amplification	-0.01	-0.02	-0.16	-0.18
Positive Coping Configuration	0.27**	0.36***	0.14	0.14
Anx. Amp./Proj. Configuration	-0.20*	-0.24*	-0.20*	-0.20*

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 7: Correlations between subjects and chosen work partners' social coping subscale scores.

	Positive Coping	Denial	Projection	Anx. Ampl.
Fun Project				
Positive Coping	0.20			
Denial		0.31**		
Projection			0.28**	
Anx. Ampl.				-0.10
Graded Project				
Positive Coping	0.23*			
Denial		0.32**		
Projection			0.19	
Anx. Ampl.				-0.09

* $p < 0.05$
** $p < 0.01$